

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1**

I. APPLICANT:

Company:

ExxonMobil Chemical Company
P.O. Box 241
Baton Rouge, LA 70821-0241

Facility:

Baton Rouge Chemical Plant
4999 Scenic Highway
Baton Rouge, East Baton Rouge Parish, Louisiana 70805
Approximate UTM coordinates are 675.70 kilometers East and 3,374.85 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

The ExxonMobil Baton Rouge Complex was established in 1909. Manufacturing operations have been ongoing continuously at the site since that time. The ExxonMobil Chemical Company, Baton Rouge Chemical Plant (BRCP) was founded in 1940 and played an important role in producing synthetic rubber for the military during World War II. It is now one of four ExxonMobil chemical manufacturing facilities in the Baton Rouge area. BRCP also has several manufacturing units that are located within the adjacent Refinery.

BRCP manufactures a variety of first generation petrochemical products used by others to produce a variety of consumer products. Feeds come primarily from the adjacent ExxonMobil Refinery (BRRF), although feedstocks are also purchased from outside suppliers and delivered by tanker or barge.

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390-V1

BRCP submitted timely applications for initial Part 70 permits for the entire facility and continues to operate pursuant to the “application shield” provided in the program. The following table lists all of the other units at BRCP and their permitted status:

Unit	Permit No.	Date Issued	Permitting Status
Acetates	1866T (M-1)	8/02/1995	Unit currently shut down
AIM Tanks	2805-V0	7/12/2002	Received Title V
Aromatics	2299-V4	10/02/2006	Received Title V
AWT	3006-V0	6/06/2006	Received Title V
AWT Thermal Combustor	1977-V0	10/19/2003	Received Title V
BELA-5	-	-	Included in Title V permit for Coproducts Units, Permit No. 2367-V0
BPLA	-	-	Included in Title V permit for Coproducts Units, Permit No. 2367-V0
BRTG	2012-V0	11/18/2002	Received Title V
Coproducts	2367-V0	2/17/2006	Received Title V
CPLA	-	-	Included in Title V permit for Coproducts Units, Permit No. 2367-V0
CP Lab	2926-V0	8/31/2005	Merged with Quality Assurance Laboratory (QAL) and moved to BRRF – Received Title V
DARLA	-	-	Included in Title V permit for Coproducts Units, Permit No. 2367-V0
DILA	-	-	Included in Title V permit for Coproducts Units, Permit No. 2367-V0
E-1000	2156-V0	7/03/2003	Received Title V
E-5000	1911-V1	12/12/2006	Received Title V
FWPS	Grandfathered	--	Shut Down 3Q 2004
Halobutyl Production Facility	2166-V1	7/16/2004	Received Title V
HCD	2314-V0	2/22/2006	Received Title V
IPA	1924-V3	10/11/2006	Received Title V
Maintrain	2031-V5	12/28/2006	Received Title V
MEK/SBA	2281-V0	10/01/2002	Received Title V
Neo Acids	2379-V0	12/02/2005	Received Title V
NOVA Alcohol	-	-	Included in Title V permit for NOVA Units, Permit No. 2123-V0
NOVA Ester	-	-	Included in Title V permit for NOVA Units, Permit No. 2123-V0
NOVA Tanks	-	-	Included in Title V permit for NOVA Units, Permit No. 2123-V0
NOVA Units	2123-V0	5/08/2006	Received Title V
OXO Alcohol	2365-V1	9/15/2006	Received Title V
OXO Tankfield	2393-V0	9/11/2005	Received Title V

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

Unit	Permit No.	Date Issued	Permitting Status
PALA	1200-V2	7/16/2004	Received Title V
Plasticizer	2320-V0	12/20/2005	Received Title V
POX	2210-V0	4/04/2005	Received Title V
RLA-3	-	-	Included in Title V permit for Vistalon, Permit No. 2376-V0
RGR	2361-V1	9/13/2006	Received Title V
SCOLA	Part of 2031-V4	11/23/2004	Merged into Maintrain – Title V received
VFU	-	-	Included in Title V permit for Vistalon, Permit No. 2376-V0
Vistalon	2376-V0	4/04/2006	Received Title V
WWTU	Grandfathered	--	Awaiting initial Title V
#5 LE/Poly	2396-V0	10/31/2005	Received Title V

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application was submitted on January 31, 2007 by BRCP requesting a Part 70 operating permit modification to Permit No. 2390-V0 for the Plant Infrastructure Facilities. Additional information dated February 15, 2007; March 26, 2007; March 30, 2007; and May 22, 2007 was also received.

This permit modification is considered a significant/major modification because it incorporates a Title I modification in which proposed pieces of equipment are subject to federal New Source Performance Standards (NSPS) regulations (40 CFR 60 Subpart IIII). As such, public notice of this permit is required.

A notice requesting public comment on the proposed permit will be published in *The Advocate*, Baton Rouge, Louisiana, on <date>, 2007. A copy of the public notice will be mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>, 2007. The proposed permit will also be sent to US EPA Region VI on <date>, 2007. All comments will be considered prior to issuance of the draft permit.

Project description

In this Part 70 operating permit significant/major modification, ExxonMobil proposes the following three (3) project-associated changes:

1. Replace five (5) permanently installed portable air compressors (EIQ Nos. S-95, S-96, S-97, S-98, and S-101) with new units along with adding an additional permanently installed portable air compressor (EIQ Nos. S-115, S-116, S-117, S-

**Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1**

118, S-119, and S-120). Until the new air compressors (EIQ Nos. S-115, S-116, S-117, S-118, S-119, and S-120) have been installed and fully operational, the existing air compressors (EIQ Nos. S-95, S-96, S-97, S-98, and S-101) will continue to operate under the requirements of Permit No. 2390-V0 issued to BRCP on January 23, 2006.

2. Add an additional steam-stripper unit at the WILA Unit to help ensure compliance with 40 CFR 61 Subpart FF - Benzene NESHAP (National Emission Standards for Hazardous Air Pollutants). The additional steam-stripper, which will be identical to the existing steam-stripper (EIQ No. V-148), will be used as a backup to the existing tower, but may also be used if needed in parallel with the existing steam-stripper. The additional steam-stripper will add a vent (EIQ No. V-148A) to the permit which will be routed to the Flare Gas Recovery System. There will be no associated increase in throughput or emissions associated with the installation of the additional stripper.
3. Increase hydrogen cyanide emissions by 0.15 tons per year (TPY) in the Flare CAP (EIQ No. M-1000). The emissions from vent streams and tank streams in the Coproducts Units (Permit No. 2367-V0 issued on February 17, 2006) that currently emit to the atmosphere will be routed to the flares that are regulated under this permit to comply with upcoming regulatory requirements in 40 CFR 63 Subpart FFFF.

The following updates to the permit are not project-related:

1. Update the benzene treatment requirements of 40 CFR 61 Subpart FF for EIQ Nos. M-71A (Secondary Wastewater Emissions (Plant Infrastructure to WILA)), V-148 (Stripper Overhead Vent), and V-148A (Stripper Overhead Vent # 2) to allow compliance with either of the following benzene removal methods: Remove benzene from the waste stream to less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis (40 CFR 61.348(a)(1)(i)) or remove benzene from the waste stream by 99% or more on a mass basis (40 CFR 61.348(a)(1)(ii)).
2. Add/update the regulatory requirements of 40 CFR 63 Subparts XX, YY, and GGGG.
3. Re-categorize EIQ No. V-148 (Stripper Overhead Vent) from Release Point (RLP071) in TEMPO to Equipment (EQT845) since emissions from this source are not released to the atmosphere but are collected by a vapor recovery system which routes the vapors back to the process or to the BRCP Flare Gas Recovery System (EIQ No. M-1000). In Permit No. 2390-V0, EIQ No. V-148 was inadvertently categorized as a Release Point (RLP) but it should have been categorized as an

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

Equipment (EQT). Similarly, the new steam-stripper, EIQ No. V-148A will be categorized as Equipment (EQT846).

Prevention of Significant Deterioration (PSD)

The proposed projects (listed above) will result in physical changes in the Plant Infrastructure Facilities. Emissions of CO, NO_x, PM₁₀, and SO₂ will increase (see table below). These increases are based on the proposed permitted potential emissions from the six new permanently installed portable air compressors. Since the increases in emissions are less than the PSD Significant Threshold for these criteria pollutants, PSD permitting requirements are not triggered.

Criteria Pollutant	PSD Significant Threshold (TPY)	Total Project-Impacted Emissions Increases (TPY)
CO	100	9.78
NO_x	40	22.38
PM₁₀	15	0.96
SO₂	40	6.66

Non-Attainment New Source Review (NNSR)

The Baton Rouge Chemical Plant (BRCP) is located in a marginal non-attainment area under the 8-hour ozone standard. For existing major sources, the marginal classification has a 25 TPY threshold for a major modification, and a 25 TPY trigger for consideration of new emissions increases of NO_x and/or VOCs. As a result of the physical modifications in Plant Infrastructure due to the proposed projects, emissions of VOC and NO_x have increased (see table below). Since the emissions increases are less than the 25 TPY NNSR analysis trigger thresholds, no further NSR evaluation for VOCs and NO_x is required.

Criteria Pollutant	NNSR Analysis Trigger Threshold (TPY)	Total Project-Impacted Emissions Increases (TPY)
VOC	25	1.08
NO_x	25	22.38

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

Permitted Air Emissions

Estimated changes in permitted emissions in tons per year (TPY) are as follows:

Pollutant	Before (TPY)	After (TPY)	Change (TPY)
PM ₁₀	38.11	33.27	- 4.84
SO ₂	8.17	9.43	+ 1.26
NO _x	178.62	119.55	- 59.07
CO	461.08	453.31	- 7.77
VOC*	225.51	220.09	- 5.42
TRS ¹	0.05	0.05	-

¹ Total Reduced Sulfur.

*VOC TAP Speciation (TPY) LAC 33:III.Chapter 51 Regulated VOC TAPs			
Pollutant	Before	After	Change
Acetonitrile	0.05	0.05	-
Benzene	4.24	4.24	-
Biphenyl	0.02	0.02	-
1,3-Butadiene ²	5.70	5.70	-
n-Butyl Alcohol ³	0.05	0.05	-
Methyl Chloride	1.71	1.71	-
Cumene	0.06	0.06	-
Dimethyl Formamide	0.05	0.05	-
Ethylbenzene	0.13	0.13	-
Ethylene Glycol	0.05	0.05	-
Formaldehyde	0.05	0.05	-
n-Hexane	8.07	8.07	-
Methanol	0.87	0.87	-
Methyl Ethyl Ketone	0.19	0.19	-
Methyl Isobutyl Ketone	0.05	0.05	-

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

*VOC TAP Speciation (TPY) LAC 33:III.Chapter 51 Regulated VOC TAPs			
Pollutant	Before	After	Change
Methyl Tert Butyl Ether	0.09	0.09	-
Naphthalene	0.63	0.63	-
Phenol	0.05	0.05	-
Polynuclear Aromatic Hydrocarbons	0.01	0.01	-
Styrene	1.66	1.66	-
2,2,4-Trimethylpentane	0.06	0.06	-
Toluene ²	1.04	1.04	-
Xylene (mixed isomers) ²	0.63	0.63	-
Total	25.46	25.46	-

Other VOCs (TPY)	200.05	194.63	- 5.42
------------------	--------	--------	--------

Non-VOC TAP Speciation (TPY) LAC 33:III.Chapter 51 Regulated Non-VOC TAPS			
Pollutant	Before	After	Change
Ammonia ³	0.54	0.73	+ 0.19
Hydrochloric Acid	281.81	281.81	-
Hydrogen Cyanide	0.01	0.16	+ 0.15
Hydrogen Sulfide ³	0.05	0.05	-
Lead	0.001	0.001	-
Sulfuric Acid ³	0.02	0.02	-
Total	282.43	282.77	+ 0.34

² Highly Reactive Volatile Organic Compound (HRVOC) TAPs.

³ State-Only emission limits.

Type of Review

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, Louisiana Comprehensive TAP Emission Control Program, New Sources Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant

**Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1**

Deterioration (PSD) and Non-Attainment New Source Review (NNSR) regulations do not apply.

MACT requirements

The Plant Infrastructure Facilities are a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51, and are located at a plant site that is a major source of toxic air pollutants (TAPs) and hazardous air pollutants (HAPs). LAC 33:III.Chapter 51 requires major sources emitting a Class I or Class II TAP in quantities greater than the Minimum Emission Rate (MER) listed for that pollutant in LAC 33:III.5112, Table 51.1 to control emissions of that pollutant to a degree that constitutes Maximum Achievable Control Technology (MACT). ExxonMobil Chemical Company, facility-wide, emits the following Group I and II TAPs at rates above their respective MERs listed in LAC 33:III.5112, Table 51.1: benzene, chloromethane, acetonitrile, dichloromethane, trichloroethylene, naphthalene and methylnaphthalenes, styrene, 1,3-butadiene, polynuclear aromatic hydrocarbons, and nickel. Sources in the Plant Infrastructure Facilities emitting the above compounds require MACT. Emission sources of all other TAPs are below their respective MERs and do not require MACT, but must comply with all applicable provisions of LAC 33:III.Chapter 51.

The flares (EIQ Nos. M-04, M-06, M-07, and M-08) are used to control vent streams from storage vessels, transfer racks, process vents, and surge control vessels subject to the HON regulations. The flares are also used to control continuous front end vent streams subject to 40 CFR 63 Subpart U (NESHAP for Group 1 Polymers and Resins). The flares are designed, maintained, and operated in accordance with 40 CFR 63.11.

The flares are also used to control sources from both the Maintrain Unit and the Refinery Gas Recovery (RGR) Unit that are subject to the ethylene production section of NESHAP: Generic MACT (40 CFR 63 Subpart YY). The flares are designed, maintained, and operated in accordance with 40 CFR 63.11.

The Miscellaneous Organic Chemical Manufacturing NESHAP (MON, 40 CFR 63 Subpart FFFF) was promulgated on November 10, 2003. The current compliance date for existing facilities is May 10, 2008. The Plant Infrastructure Facilities (including the WILA and Flare Gas Recovery Units) contain recovery or control devices for potentially affected sources at BRCP and are, therefore, considered part of the MCPU (Miscellaneous Organic Chemical Manufacturing Process Unit). The flares are designed, maintained, and operated in accordance with 40 CFR 63.11.

The RICE (Reciprocating Internal Combustion Engine) MACT (40 CFR 63 Subpart ZZZZ) was promulgated on June 15, 2004. The current compliance date for new stationary RICEs if installed after August 16, 2004 is upon startup of the RICE. The new air compressors (EIQ Nos. S-115, S-116, S-117, S-118, S-119, and S-120) are all less than 500 horsepower (hp) and are therefore not subject to the requirements of 40 CFR 63

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

Subpart ZZZZ, but are subject to NSPS 40 CFR 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICEs)). The firewater pumps (EIQ Nos. S-99 and S-100) are greater than 500 hp, but are defined as emergency stationary RICEs. As such, they are not subject to 40 CFR 63 Subpart ZZZZ or the General Provisions (40 CFR 63 Subpart A), except for the Initial Notification requirements as specified in 40 CFR 63.6645(d).

Air Modeling Analysis

Dispersion Model(s) Used: None

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Air Quality Standard (NAAQS)
N/A			

Impact on air quality from the Plant Infrastructure Facilities will be below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property. No air modeling analysis is required.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit. These releases are small and will have an insignificant impact on air quality.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3, and 4 of the draft permit.

IV. PERMIT SHIELD

Not applicable.

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

V. PERIODIC MONITORING

Periodic monitoring is required for certain sources in this permit. All periodic monitoring shall be conducted in accordance with state and federal regulations, as applicable. See the Facility Specific Requirements of the draft Part 70 permit for monitoring requirements.

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

ID No:	Requirement	Notes
M-04 (# 10 Flare) M-06 (# 16 Flare) M-07 (# 25 Flare) M-08 (# 26 Flare)	40 CFR 60 Subpart NNN Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	Combust TOC emissions in a flare that complies with 40 CFR 60.18. [40 CFR 60.662(b)]
	40 CFR 60 Subpart RRR Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	Combust TOC emissions in a flare that complies with 40 CFR 60.18. [40 CFR 60.702(b)]
	40 CFR 63 Subpart G National Emission Standards for Organic Hazardous Air Pollutants (HON) From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	Inlet emissions: Organic HAP >= 95% reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). [40 CFR 63.119(e)(1)]
	40 CFR 63 Subpart XX National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	If the total annual benzene quantity from waste at the facility is greater than or equal to 10 Mg/yr, as determined according to 40 CFR 61.342(a), manage and treat waste streams according to any of the options in 40 CFR 61.342(c)(1) through (e) or transfer waste off-site. [40 CFR 63.1095(b)(2)]

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

ID No:	Requirement	Notes
(continued) M-04 (# 10 Flare) M-06 (# 16 Flare) M-07 (# 25 Flare) M-08 (# 26 Flare)	40 CFR 63 Subpart YY NESHAP for Source Categories: Generic MACT	Storage Vessels: Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices and meet the requirements of §63.982(a)(1).
	40 CFR 63 Subpart YY NESHAP for Source Categories: Generic MACT	Process Vents: Reduce emissions of organic HAP by 98 weight-percent; or reduce organic HAP or TOC to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices and meet the requirements specified in §63.982(b) and (c)(2).
	40 CFR 63 Subpart YY NESHAP for Source Categories: Generic MACT	Transfer Operations: Reduce emissions of organic HAP by 98 weight-percent; or reduce organic HAP or TOC to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices as specified in §63.1105.
S-99, S-100 (Firewater Pumps) S-115, S-116, S-117, S-118, S-119, S-120 (Air Compressors #1A-6)	LAC 33:III.Chapter 22 Control of Emissions of Nitrogen Oxides (NO _x) in the Baton Rouge Non-attainment Area and Region of Influence	EXEMPT. Diesel-fired stationary internal combustions engines are exempt from the NO _x RACT requirements. [LAC 33:III.2201.C.14]
	LAC 33:III.Chapter 51 Subchapter A Comprehensive Toxic Air Pollutant Emission Control Program	EXEMPT. Sources are fired with diesel fuel, a Group 1 virgin fossil fuel. Emissions of toxic air pollutants (TAPs) from the combustion of Group 1 and Group 2 virgin fossil fuels are exempt from the requirements of LAC 33:III.Chapter 51, Subchapter A. [LAC 33:III.5105.B.3.a]
V-148, V-148A (Stripper Overhead Vents)	40 CFR 61 Subpart FF National Emission Standards for Benzene Waste Operations	Treatment process: Remove benzene in the waste stream to less than 10 ppm(w) on a flow-weighted annual average basis, or remove benzene from the waste stream by 99% or more on a mass basis. [40 CFR 61.348(a)(1)]

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

ID No:	Requirement	Notes
<i>(continued)</i> V-148, V-148A (Stripper Overhead Vents)	40 CFR 63 Subpart G HON From SOCM Process Vents, Storage Vessels, Transfer Operations, and Wastewater	Reduce emissions of total organic HAPs by 98 wt% or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, corrected to 3% oxygen. [40 CFR 63.113(a)(2)]

VII. STREAMLINED REQUIREMENTS

Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
U-114 WILA and Flare Gas Recovery Fugitive Emissions	40 CFR 60 Subpart VV	Streams containing 10% VOC	40 CFR 63 Subpart H - HON
	40 CFR 61 Subpart J	Streams containing 10% Benzene	
	40 CFR 61 Subpart V	Streams containing 10% Benzene	
	40 CFR 63 Subpart H	Streams containing 5% VOHAP	
	LA Non-HON MACT	Streams containing 5% VOTAP	
	LAC 33:III.2122	Streams containing 10% VOC	
U-60 Utilities Area Fugitive Emissions	LA Non-HON MACT	Streams containing 5% VOTAP	LA Non-HON MACT
	LAC 33:III.2122	Streams containing 10% VOC	

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

VIII. GLOSSARY

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status - Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Plant Infrastructure Facilities
Draft Part 70 Permit Significant/Major Modification
ExxonMobil Chemical Company – Baton Rouge Chemical Plant
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: PER20070005
Draft Permit: 2390 –V1

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit - Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10} - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

TRS (Total Reduced Sulfur) – means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.